AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-11. (Cancelled)

12. (Currently Amended) A fluid transfer device, comprising:

a lid portion;

an edge portion connected to the lid portion, the edge portion and lid portion forming a receiving cap, the receiving cap defining a space configured to receive a bead of a container closed by an elastic stopper, the elastic stopper having an internal surface configured to face an interior of the container and an external surface, the edge portion being configured to center the bead within the space when the bead is substantially disposed in the space; and

a piercing mandrel connected to the lid portion and projecting into the space,

wherein the piercing mandrel includes a piercing portion configured to pierce the elastic stopper while the bead is being substantially disposed in the space, the piercing portion of the piercing mandrel being substantially conically shaped and widening toward the lid portion;

wherein the piercing mandrel further includes a sealing portion formed integrally with and extending from the lid portion, the sealing portion of the piercing mandrel having a substantially tapered shape, a smallest cross-section of the sealing portion adjoining the piercing portion of the piercing mandrel, the sealing portion ~~contacting the piercing portion and~~ having a smallest diameter greater than a largest diameter of the

piercing portion, the sealing portion being configured to contact the elastic stopper when the bead is substantially disposed in the space;

wherein, when the bead is substantially disposed in the space, a distance between a base of the sealing portion and a distal end of the sealing portion on the piercing mandrel is more than a length between the base of the sealing portion and the external surface of the elastic stopper within the container;

wherein the piercing mandrel includes a flow channel there through, the flow channel being configured to convey fluid away from the container.

13. (Previously Presented) The fluid transfer device of claim 12, wherein the receiving cap includes a central longitudinal axis,

wherein the receiving cap is substantially symmetrical about the central longitudinal axis.

14. (Previously Presented) The fluid transfer device of claim 12, wherein the diameter of the piercing mandrel as it transitions from the front piercing portion to the sealing portion is stepped.

15. (Previously Presented) The fluid transfer device of claim 12, wherein the sealing portion of the piercing mandrel includes an end face,

wherein the end face is configured such that when the bead is substantially disposed in the space, the interface between the end face and the elastic stopper has an annular shape.

16. (Previously Presented) The fluid transfer device of claim 12, wherein the sealing portion of the piercing mandrel is configured to penetrate the elastic stopper when the bead is substantially disposed in the space.

17. (Previously Presented) The fluid transfer device of claim 12, wherein the edge portion includes an inward projection configured to engage a behind portion of the bead when the bead is substantially disposed in the space.

18. (Previously Presented) The fluid transfer device of claim 17, wherein a first axial distance between the inward projection and the sealing portion is less than a second axial distance between the inward projection and a surface of the elastic stopper facing the lid portion when the bead is substantially in the space.

19. (Previously Presented) The fluid transfer device of claim 15, wherein the end face includes an integrated sealing element.

20. (Previously Presented) The fluid transfer device of claim 19, wherein the sealing element is an O-ring.

21. (Cancelled)

22. (Cancelled)

23. (Previously Presented) The fluid transfer device of claim 12, wherein a transition between the sealing portion of the piercing mandrel and the piercing portion of the piercing mandrel is substantially stepless.

24. (Previously Presented) The fluid transfer device of claim 12, wherein the piercing mandrel is embedded in the lid portion.

25. (Previously Presented) The fluid transfer device of claim 12, wherein the piercing mandrel is stationary relative to the lid portion when the piercing portion pierces the elastic stopper.

26. (Currently Amended) The fluid transfer device of claim 17, wherein the inward projection is disposed ~~radically~~ radially around the piercing mandrel even before the piercing portion pierces the elastic stopper.

27. (Previously Presented) The fluid transfer device of claim 17, wherein the piercing portion is disposed further away from the lid portion than the inward projection.

28. (Previously Presented) The fluid transfer device of claim 12, wherein the sealing portion of the piercing mandrel is configured to penetrate the elastic stopper while the bead is being substantially disposed in the space.

29. (Previously Presented) The fluid transfer device of claim 17, wherein the sealing portion is configured to contact the elastic stopper substantially at the same time as when the inward projection engages with the behind portion of the bead.

30. (Previously Presented) The fluid transfer device of claim 17, wherein a portion of the edge portion extends away from both the lid portion and the inward projection.

31. (Previously Presented) The fluid transfer device of claim 17, wherein the edge portion includes a free edge extending away from the inward projection at least partly along a direction substantially parallel to a central longitudinal axis of the receiving cap.

32. (Previously Presented) The fluid transfer device of claim 31, wherein the free edge has an outer diameter larger than an outer diameter of both the inward projection and a portion of the edge portion between the inward projection and the lid portion.

33. (Previously Presented) The fluid transfer device of claim 31, wherein the free edge has an inner diameter larger than an outer diameter of both the inward projection and a portion of the edge portion between the inward projection and the lid portion.

34. (Previously Presented) A fluid transfer device, comprising:

a lid portion;

an edge portion connected to the lid portion; and

a piercing mandrel connected to the lid portion and configured to receive, in a space defined by the edge portion and the lid portion, a bead of a container closed by an elastic stopper,

wherein the piercing mandrel includes a piercing portion configured to pierce the elastic stopper all the way from an external surface of the elastic stopper outside the container to an internal surface of the elastic stopper inside the container when the bead is received in the space; and

wherein the piercing mandrel further includes a sealing portion extending from the lid section along part of the piercing portion and ending in a substantially abrupt step, the substantially abrupt step being configured to engage and seal the pierced portion of the elastic stopper when the bead is received in the space such that the sealing portion partially enters the elastic stopper.

35. (New) The fluid transfer device of claim 12, wherein the sealing portion is further configured to seal a tear in the elastic stopper formed upon eccentric application of the fluid transfer device to the elastic stopper.

36. (New) A plastic fluid transfer device, comprising:

a lid portion;

an edge portion formed integrally with the lid portion, the edge portion and lid portion defining a space for receiving a bead of a container closed by an elastic stopper, wherein the edge portion includes an inward projection configured to center the bead as

the bead is received within the space and to engage a behind portion of the bead when the bead is substantially disposed in the space; and

a piercing mandrel formed integrally with and extending from the lid portion, the piercing mandrel being substantially continuously conically shaped along its length, widening from a piercing tip to the lid portion, wherein the piercing mandrel is configured to pierce completely through a thickness of the elastic stopper from an external surface of the elastic stopper outside the container to an internal surface of the elastic stopper inside the container as the bead is received in the space and wherein the piercing mandrel is configured to substantially concurrently seal the pierced portion of the elastic stopper as the bead is received in the space.

37. (New) The fluid transfer device of claim 36, wherein the piercing mandrel is further configured to seal a tear in the elastic stopper formed upon eccentric application of the fluid transfer device to the elastic stopper.

38. (New) The fluid transfer device of claim 36, wherein the piercing mandrel further includes a sealing portion formed integrally with and extending from the lid portion, the sealing portion having a diameter of sufficient dimension to seal the pierced portion of the elastic stopper when the bead is substantially disposed in the space.

39. (New) The fluid transfer device of claim 38, wherein the sealing portion is further configured to substantially concurrently seal a tear in the elastic stopper formed upon eccentric application of the fluid transfer device to the elastic stopper.